

## CLAIMS

1. A computer system comprising:

a first storage unit (40), storing an OS program, an application  
5 program, and data;

a memory (20), for respectively spreading, as necessary, the OS  
program, an application program, and data stored in the first storage unit;

a program execution unit (10), performing spread onto the memory  
and execution of the OS program when provided with an instruction of  
10 starting up the system, performing spread onto the memory and execution  
of a specific application program for which a startup instruction is provided  
under management of the OS program spread on the memory, and  
performing, as necessary, a process of preparing new data on the memory or  
modifying existing data on the memory; and

15 an spreading and storing unit (30), executing, based on an  
instruction of a program being executed by the program execution unit, an  
spreading process of spreading data, stored in the first storage unit, onto the  
memory and a storing process of storing data spread on the memory into the  
first storage unit;

20 the computer system further comprising:

a second storage unit (70) for storing backup data;

an application registration unit (50), registering one or a plurality of  
application programs based on an instruction of an operator; and

a backup management unit (60), monitoring operations of the  
25 spreading and storing unit and performing, when the spreading and storing  
unit executes the storing process of storing specific data, spread on the  
memory, into the first storage unit based on an instruction of an application  
program registered in the application registration unit, a process of  
redundantly storing a copy of the specific data into the second storage unit  
30 as backup data.

2. A computer system comprising:

a first storage unit (40), storing an OS program, an application  
program, and data;

35 a memory (20), for respectively spreading, as necessary, the OS  
program, an application program, and data stored in the first storage unit;

a program execution unit (10), performing spread onto the memory and execution of the OS program when provided with an instruction of starting up the system, performing spread onto the memory and execution of a specific application program for which a startup instruction is provided under management of the OS program spread on the memory, and performing, as necessary, a process of preparing new data on the memory or modifying existing data on the memory; and

an spreading and storing unit (30), executing, based on an instruction of a program being executed by the program execution unit, an spreading process of spreading data, stored in the first storage unit, onto the memory and a storing process of storing data spread on the memory into the first storage unit;

the computer system further comprising:

a second storage unit (70) for storing backup data;

an extension registration unit (55), registering, based on an instruction of an operator, one or a plurality of extensions among file name extensions associated with application programs; and

a backup management unit (60), monitoring operations of the spreading and storing unit and performing, when the spreading and storing unit executes the storing process of storing specific data, with a file name including an extension registered in the extension registration unit, from the memory into the first storage unit, a process of redundantly storing a copy of the specific data into the second storage unit as backup data.

3. A computer system comprising:

a first storage unit (40), storing an OS program, an application program, and data;

a memory (20), for respectively spreading, as necessary, the OS program, an application program, and data stored in the first storage unit;

a program execution unit (10), performing spread onto the memory and execution of the OS program when provided with an instruction of starting up the system, performing spread onto the memory and execution of a specific application program for which a startup instruction is provided under management of the OS program spread on the memory, and performing, as necessary, a process of preparing new data on the memory or modifying existing data on the memory; and

an spreading and storing unit (30), executing, based on an instruction of a program being executed by the program execution unit, an spreading process of spreading data, stored in the first storage unit, onto the memory and a storing process of storing data spread on the memory into the first storage unit;

the computer system further comprising:

a second storage unit (70) for storing backup data;

an application registration unit (50), registering one or a plurality of application programs based on an instruction of an operator;

an extension registration unit (55), registering, based on an instruction of an operator, one or a plurality of extensions among file name extensions associated with application programs; and

a backup management unit (60), monitoring operations of the spreading and storing unit and performing, when the spreading and storing unit executes the storing process of storing specific data, with a file name including an extension registered in the extension registration unit, from the memory into the first storage unit based on an instruction of an application program registered in the application registration unit, a process of redundantly storing a copy of the specific data into the second storage unit as backup data.

4. The computer system according to any one of Claims 1 to 3, wherein:  
a new file name is generated by changing, based on a predetermined algorithm, an extension portion included in a file name of data stored into the first storage unit (40) and storing the backup data into the second storage unit (70) using the new file name.

5. The computer system according to any one of Claims 1 to 4, wherein:  
the second storage unit (70) is arranged from a plurality of data storage devices (71, 72, and 73),

a divided storage processing unit (80), being connected to the plurality of data storage devices via a network, performing a process of dividing a provided file into a plurality of division files and storing the division files respectively into different data storage devices, and outputting information indicating a method of division and indicating data storage devices that became storage destinations of the respective division files as

management information, is furthermore provided, and

when a process of storing backup data into the second storage unit is performed, a file of the backup data is provided to the divided storage processing unit.

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6. A computer program or a computer-readable recording medium recording said computer program, said computer program comprising:

10 a first program, making a computer function as the application registration unit (50) or the extension registration unit (55) in the computer system according to any one of Claims 1 to 5; and

a second program, making a computer function as the backup management unit (60) in the computer system according to any one of Claims 1 to 5.

15 7. An automatic data backup method for making data be backed up automatically in a computer system having a function of making a desired application program be executed under management of an OS program, the backup method comprising:

20 an application registration step for making one or a plurality of application programs, among application programs to be executed, be registered by the computer system based on an instruction of an operator;

25 an application judgment step for making the computer system judge, when the computer system executes a storing process of storing specific data into a predetermined storage location, whether or not the storing process is based on an instruction of an application program that has been registered in the application registration step; and

30 a backup step for making the computer system redundantly store a copy of the specific data as backup data into a location that differs from said storage location when a positive judgment result is obtained in the application judgment step.

8. An automatic data backup method for making data be backed up automatically in a computer system having a function of making a desired application program be executed under management of an OS program, the backup method comprising:

35 an extension registration step for making one or a plurality of

extensions, among file name extensions associated with application programs to be executed, be registered by the computer system based on an instruction of an operator;

5 an extension judgment step for making the computer system judge, when the computer system executes a storing process of storing specific data into a predetermined storage location, whether or not the specific data has a file name including an extension that has been registered in the extension registration step; and

10 a backup step for making the computer system redundantly store a copy of the specific data as backup data into a location that differs from said storage location when a positive judgment result is obtained in the extension judgment step.

9. An automatic data backup method for making data be backed up automatically in a computer system having a function of making a desired application program be executed under management of an OS program, the backup method comprising:

15 an application registration step for making one or a plurality of application programs, among application programs to be executed, be registered by the computer system based on an instruction of an operator;

20 an extension registration step for making one or a plurality of extensions, among file name extensions associated with application programs to be executed, be registered by the computer system based on an instruction of an operator;

25 an application judgment step for making the computer system judge, when the computer system executes a storing process of storing specific data into a predetermined storage location, whether or not the storing process is based on an instruction of an application program that has been registered in the application registration step;

30 an extension judgment step for making the computer system judge, when the computer system executes a storing process of storing specific data into a predetermined storage location, whether or not the specific data has a file name including an extension that has been registered in the extension registration step; and

35 a backup step for making the computer system redundantly store a copy of the specific data as backup data into a location that differs from said



storage location when positive judgment results are obtained in both the application judgment step and the extension judgment step.

10. A program for making a computer execute the processes of the  
5 respective steps making up the automatic backup method according to any  
one of Claims 7 to 9, or a computer-readable recording medium recording  
said program.